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an input interface coupled to the random source for receiving a random data stream from the random source and outputting the random bit stream;

- a processor for receiving the random bit stream from the input interface and outputting the random bit stream in a machine readable form;
 - a plurality of disk files for saving random bits output from the processor;
- a memory coupled to the processor for storing machine readable instructions used by the processor for formatting the random bit stream into a machine readable form;
- a network connection coupled to the processor for making the random bit stream available to a network; and
- a download task executed by the processor for providing to a user a any desired number of random bits requested by the user.
- 2. (Original) The system according to claim 1, wherein the input interface includes an analog-to digital converter for converting the random source data into a digital signal.
- 3. (Original) The system according to claim 1, wherein the processor for receiving the random bit stream comprises:
 - a first processor; and
 - a second processor communicatively coupled to said first processor.
- 4. (Original) The system according to claim 3, wherein the first processor and second processor share said memory.
- 5. (Original) The system according to claim 1, wherein the network connection communicates with an Internet protocol network.
- 6. (Original) The system according to claim 1, wherein the network connection communicates with a wireless network.
- 7. (Original) The system according to claim 1, wherein the memory stores accounting information about the random bit stream.

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- 8. (Currently amended) A method for generating random bits as a function of a random source and distributing the random bits over a network, the method comprising the steps of: collecting random data from a random source; processing the random data to produce a random bit stream in a machine readable form; saving the random bits in a plurality of disk files; providing the random bits to a network connection; and transmitting any desired a number of random bits requested by a user over the network.
- 9. (Original) The method of claim 8, further comprising the step of: generating random data.
- 10. (Original) The method of claim 8, further comprising the step of: receiving a random bit stream at a user location on the network.
- 11. (Original) The method of claim 8, further comprising the step of: validating a user account prior to transmitting the random bits over the network.
- 12. (Currently amended) A distributed system for the production and distribution of random bits, the distributed system comprising:
 - a first random number source generating a first random data stream;
 - a second random number source generating a second random data stream;
- an interface to the first random number source for receiving the first random data stream and the second random data stream, the interface outputting a random bit stream;
- a processor for receiving the random bit stream from the interface, and for formatting the random bit stream for distribution in a machine readable form;
- a network connection coupled to the processor for making the machine readable random bit stream available to a network; and
- a memory coupled to the processor for storing machine readable instructions used by the processor to format the random bit stream for distribution to the network connection in response to a user request for <u>a any desired</u> number of the random bits.

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13. (Currently amended) A computer readable medium containing instructions for controlling at least one machine to perform a method for distributing random bits to a remote user, the method comprising the steps of:

converting a random data stream into a machine readable random bit stream; saving the random bits to a plurality of disk files; providing the machine readable random bit stream to a network connection; and transmitting <u>a any desired</u>-number of random bits requested by a user in the machine readable random bit stream over a network.

14. (Currently amended) A method for producing a random bit stream from a random source and offering the random bit stream to a remote user, the method comprising the steps of:

processing the random bit stream to form a distributable random bit stream;

making the distributable random bit stream available to a remote user from at least one of a plurality disk files; and

transmitting to the user over a network <u>a any desired</u>-number of random bits requested by the user.

- 15. (Original) The method of claim 14, further comprising the step of: processing the random bit stream to ensure that successive bits are unbiased.
- 16. (Original) The method of claim 14, further comprising the step of: performing accounting operations on the random bit stream to ensure that the remote user is billed for the received random bit stream.
- 17. (Original) The method of claim 14, further comprising the step of: authorizing the remote user to receive the random bit stream prior to distributing the distributable random bit stream to the remote user.
- 18. (Original) The method of claim 14, further comprising the step of: confirming that the remote user has received the distributable random bit stream.
- 19. (Original) The method of claim 14, further comprising the step of: